

## **HYDROXYCHLOROQUINE CARDIOTOXICITY IN PATIENT WITH SYSTEMIC LUPUS ERYTHEMATOSUS ON HEMODIALYSIS.**

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Hydroxychloroquine is used to treat systemic lupus erythematosus, it has several benefits including amelioration of skin, joint and constitutional symptoms, improvement of survival rates, prevention of lupus flare, renal damage and central nervous system lupus, reduction of hyperlipidaemia, hyperglycaemia and antithrombotic effect.

We describe a case of a 41-year-old woman with systemic lupus erythematosus on hemodialysis who developed hydroxychloroquine-cardiotoxicity.

In September 2015, she presents a rapidly progressive renal failure associated with nephrotic proteinuria and migrant arthralgia. Renal biopsy was performed and diffuse proliferative glomerulonephritis class IV G with severe arteriosclerosis was diagnosed, steroid therapy and cyclophosphamide was administered. Due to the rapid deterioration of renal function, dialysis treatment was initiated. In October 2017 was started hydroxychloroquine due to arthralgia.

Subsequently, discrete clinical stability over the years, until September 2018, when the patient has shown dyspnea and fatigue. She was admitted to our Hospital for further investigation. Echocardiography, shown systolic dysfunction with an left ventricular ejection function of 32% and circumferential pericardial effusion and angiography showed normal coronary arteries. Moreover tests were carried out to exclude the presence of an infectious myocarditis. Due to the symptomatology and in the suspicion of hydroxychloroquine toxicity were performed magnetic resonance that shown diffuse global hypokinesia of left ventricle with septal dysfunction, circumferential pericardial effusion and myocardial edema and endomyocardial biopsy that reveals vacuolar myopathy, myeloid bodies and interstitial fibrosis. Her symptoms were improved in the following weeks as well as the echocardiographic parameters after the cessation of the hydroxychloroquine and treating of heart failure (hemodialysis and beta-blocker drug).

Cardiotoxicity was enhanced in elderly, by underlying cardiac disease and renal failure, longer disease duration, higher daily dose of hydroxychloroquine, therefore these risk factors must be evaluated and regular screening are needed to monitor for side effects. Moreover, dosage reduction may be needed in patient with chronic kidney disease.